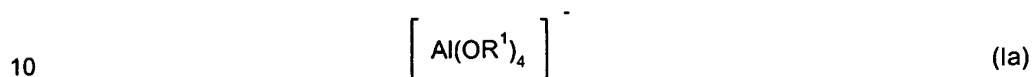


Catalyst system for olefin polymerization

Abstract

- 5 The present invention relates to a catalyst system for olefin polymerization comprising an organic transition metal compound and, as cocatalyst, an ionic compound made up of anions of the formula (Ia),



where

- the radicals R^1 are identical or different and are each, independently of one another, a radical
15 $\text{R}^2\text{R}^3(\text{CF}_3)_2$,

R^2 is a carbon or silicon atom and

- R^3 is hydrogen, $\text{C}_1\text{-C}_{20}$ -alkyl, $\text{C}_1\text{-C}_{20}$ -fluoroalkyl, $\text{C}_6\text{-C}_{20}$ -aryl, $\text{C}_6\text{-C}_{20}$ -fluoroaryl, $\text{C}_7\text{-C}_{40}$ -arylalkyl,
20 $\text{C}_7\text{-C}_{40}$ -fluoroarylalkyl, $\text{C}_7\text{-C}_{40}$ -alkylaryl, $\text{C}_7\text{-C}_{40}$ -fluoroalkylaryl or an SiR^4_3 group, where

R^4 may be identical or different and is each $\text{C}_1\text{-C}_{20}$ -alkyl, $\text{C}_1\text{-C}_{20}$ -fluoroalkyl, $\text{C}_6\text{-C}_{20}$ -aryl, $\text{C}_6\text{-C}_{20}$ -fluoroaryl, $\text{C}_7\text{-C}_{40}$ -arylalkyl, $\text{C}_7\text{-C}_{40}$ -fluoroarylalkyl, $\text{C}_7\text{-C}_{40}$ -alkylaryl or $\text{C}_7\text{-C}_{40}$ -fluoroalkylaryl,

- 25 and Lewis-acid cations or Brönsted acids as cations.

In addition, the invention relates to the process for preparing such a catalyst system and to a process for the polymerization of olefins in which this catalyst system is used.

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